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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|---|----------------------|---------------------|------------------|
| 10/550,067 | 09/21/2005 | Kazuhito Kurose | 2005_1487A | 2121 |
| | 7590 01/17/2007 I, LIND & PONACK, L.L. | P. | EXAM | INER |
| 2033 K STREET N. W. | | | IP, SIKYIN | |
| | UITE 800 /ASHINGTON, DC 20006-1021 ART UNIT PAPER NU | | | PAPER NUMBER |
| | • | | 1742 | |
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| SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MO | NTHS | 01/17/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | Application No. | Applicant(s) | |
|--|--|--|-----|
| | 10/550,067 | KUROSE ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Sikyin Ip | 1742 | |
| The MAILING DATE of this communication app | pears on the cover sheet with the | correspondence address | |
| Period for Reply | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tircuit apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communicatio (C) (35 U.S.C. § 133). | |
| Status | | | |
| 1)⊠ Responsive to communication(s) filed on <u>21 S</u> | entember 2005 | | |
| | action is non-final. | | |
| . 3) Since this application is in condition for allowar | | osecution as to the merits is | S |
| closed in accordance with the practice under E | | | |
| Disposition of Claims | | | |
| 4)⊠ Claim(s) <u>8-19</u> is/are pending in the application. | | | |
| 4a) Of the above claim(s) is/are withdraw | wn from consideration. | | |
| 5) Claim(s) is/are allowed. | | | |
| 6)⊠ Claim(s) <u>8-19</u> is/are rejected. | | | |
| 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | • |
| Application Papers | | | |
| 9)☐ The specification is objected to by the Examine | r. | | |
| 10)⊠ The drawing(s) filed on 21 September 2005 is/a | are: a)⊠ accepted or b)□ objec | ted to by the Examiner. | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) including the correct | • | • | d). |
| 11)☐ The oath or declaration is objected to by the Ex | caminer. Note the attached Office | Action or form PTO-152. | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | |)-(d) or (f). | |
| 1. Certified copies of the priority document | | : NI- | |
| 2. Certified copies of the priority documents3. Copies of the certified copies of the priority | | | |
| application from the International Bureau | · | ed in this National Stage | |
| * See the attached detailed Office action for a list | , , , , | ed | |
| | or the defining depice flot receive | | • |
| | | | |
| Attachment(s) | | | |
| 1) X Notice of References Cited (PTO-892) | 4) Interview Summary | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/21/05</u> . | 6) Other: | акент пррпоацон | |
| S. Patent and Trademark Office | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 is indefinite because the wordings "as" in line 2 and "particularly" in line 5 render the claim indefinite. It is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 9-13 are indefinite because the phrase "a ratio" is superfluous.

Claims 12 and 13, line 3, the wording "radio" is an apparent typographical error.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-19 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 5942056 to Singh.

Singh discloses the features including the copper based alloy composition (col. 4, lines 4-11) and functions of each element (col. 3, lines 20-59) except for the intermetallic compounds. But, claimed intermetallic compounds are material properties which would have been inherently possessed by the cast product. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product.

In re Best, 195 USPQ, 430 and MPEP § 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)."

Conclusion

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the

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rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been meet by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121; 37 C.F.R. Part §41.37 (c)(1)(v); MPEP §714.02; and MPEP §2411.01(B).

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SIKYIN IP PRIMARY EXAMINER ART UNIT 1742

S. lp January 7, 2007